metrics to include in the templates. In addition, the UI module 420 allows the end-user to specify parameters of the templates and/or metrics, such as the name of the template and how to represent and display the metric.

[0051] A rendering module 422 works in combination with the UI module 420 and/or other modules in the mapping engine 118 to render a display illustrating the map and metrics from the active templates. FIG. 5 shows an example of a display 500 produced by the rendering module 422 according to one embodiment. This display 500 illustrates a map and metrics that are displayed when a "house hunting" template is active. The illustrated map and metrics are merely representative examples, and other embodiments can show different maps and/or metrics.

[0052] The display 500 has two primary areas, a map area 510 and a metrics panel 512. Generally, the map area 510 shows the map and any metrics that are configured to appear on the map. The map area 510 includes a reference point 514 on which the metrics are based. In one embodiment, the reference point is a location on the map, such as the center of the displayed region. In another embodiment, the reference point is controlled by the mouse or other input device and can be freely moved on the map by the end-user. The metrics are updated in real time as the reference point changes.

[0053] An arrow 516 on the display indicates a direction and distance from the reference point 514 to an ocean view. In this embodiment, the length of the arrow 516 indicates the quality of the view, and the width of an arc associated with the arrow indicates the width of the view. A text label on the map indicates the distance to the view. The ocean view arrow 516 is an example of a computed metric determined by the metric computation module 418 based on other metrics, such as topographical information and building height information.

[0054] Three vector arrows 518A-C on the map, indicate the direction and distance to other points on the map. These other points can be directly specified by the end-user and/or template. For example, the end-user can place a point at a potential employer, e.g., "Google" and the arrow 518A represents the direction and distance to the employer from the reference point. The road to the employer is also labeled with "To Google." In addition, the points can be specified indirectly. For example, arrow 518B points to the nearest grocery store, a SAFEWAY, and arrow 518C points to the nearest school 520, Lincoln Elementary School. In one embodiment, these indirectly specified points are updated in real time as the reference point changes.

[0055] Two concentric lines 522A-B represent boundaries described in the template. For example, the innermost line 522A defines areas within 5 minutes driving time, and the outermost line defines areas within 10 minutes driving time. Other embodiments represent other and/or different data.

[0056] In one embodiment, metrics are displayed as graphical images and/or 3-D models. For example, an enduser can hover the cursor over the location of a house on the map, and cause the display 500 to show an image and/or 3-D model of the house. The image/model can appear in the map area 510, metrics panel 512, and/or elsewhere on the display 500.

[0057] The metrics panel 512 displays metrics that are configured to appear in the panel. The illustrated display 500 shows the panel adjacent to the map. In other embodiments, the panel is located at other locations and/or is in a floating

window that can be moved and manipulated by the end-user. The metrics panel **512** includes a variety of different metrics. In one embodiment, each computed metric is determined in real time by the metric computation module **418** in response to the current location of the reference point **514**. The metric can display its value using one or more of a variety of different representations, including textual, numeric, and graphical representations.

[0058] In the illustrated example of the metrics panel 512, a "distance to highway" metric 514 displays the distance to the nearest major highway as a numeric value (0.5 miles in this example). An "estimated noise" metric 526 uses a bar indicator to show the estimated noise at the reference point. Two bar graphs 528, 529 respectively indicate the distance to the nearest commercial property, and the traffic load for nearby roads. A "municipality" text box 530 shows the name of the municipality containing the reference point 514, which in this example is "Mountain View."

[0059] An "average price per square foot" metric 532 uses a sliding scale and number to indicate its value, while a "tax index" metric 534 shows the cost per year. A crime rate metric 535 represents its value as a ranking from one to 10. A "nearest elementary school" metric 536 displays multiple sub-metrics for the school 520 displayed in the map 510, including the school's ranking (based on external data and/or end-user defined criteria), the distance to it, and whether one would need to cross a highway when traveling from the reference point 514 to the school.

[0060] A "distance to work places" metric 538 displays numeric values indicating the distance to one or more work places defined by the template and/or end-user. In this example, the metric displays the distance to two locations, "Google" and "Acme." A volume control 520 controls the volume of a multimedia metric. The multimedia metric provides audio/visual data to the end-user based on the location of the reference point 514. Finally, a "my ranking" metric 542 uses a graphical indicator (three out of four stars) and a numeric indicator ("3") to rank the designated location using criteria specified by the template and/or end-user. Although not shown in FIG. 5, in one embodiment, the rendering module 422 displays ads received from the ad server module 314 in the map area 510, metric panel 512, and/or elsewhere in the display.

[0061] FIG. 6 is a flow chart illustrating steps performed by the mapping engine 118 according to one embodiment. Different embodiments perform additional and/or different steps. In addition, other embodiments perform the steps in different orders. While FIG. 6 illustrates steps from the perspective of the mapping engine 118, one of skill in the art will recognize that complementary steps are performed by the map server 110, metrics server 112, end-user, and/or other entities.

[0062] The mapping engine 118 receives 610 one or more templates. The engine 118 can receive pre-made templates from the metrics server 112 or elsewhere on the network 114. For example, mapping engine 118 can present the end-user with a UI that allows the end-user to select from among the templates stored at the metrics server 112. In addition, the engine 118 can receive the templates as the end-user uses the client 116 to design new templates and/or modify existing templates. In one embodiment, the mapping engine 118 stores the templates for subsequent use.

[0063] The mapping engine 118 receives 612 a designation of an active template. For example, the end-user can use